## REMARKS

Claims 1-20 remain pending in the above application. Claims 1, 10 and 13 have been amended.

The objection to the drawings, more specifically Fig. 5, has been addressed. A corrected drawing sheet is being submitted herewith which includes reference numbers for the small ridges 65 and the rounded ridges 67 in Fig. 5. These elements are fully described in the specification in paragraph 21. The corrections to the drawings are shown in red. Formal drawings will be submitted upon approval of the corrections by the Examiner.

The claims objections have also been addressed. Claims 1 and 10 have been amended to correct certain informalities. Claim 1, line 3 now recites "one receptacle" of the plurality of receptacles cited in line 2. Claim 10 now recites "said electrical conductors" which refer to the same electrical conductors recited in claim 1.

Turning to the section 112 rejections, applicant respectfully believes that the recitation of "the first edge" in claim 17, line 2 is definite. An explanation is believed to be helpful in rectifying the Examiner's confusion. Claim 17 depends directly from claim 13. Line 4 of claim 13 recites "a conductive busbar having first and second edges." So in claim 13, the conductive busbar is defined as having a first edge and a second edge. Claim 17 refers to the first edge of the busbar which is already defined in claim 13. It is therefore respectfully believed that sufficient antecedent basis exists for this limitation in claim 17.

Turning now to the section 102 rejection, applicant respectfully submits that claims 1 and 13 are not anticipated or rendered obvious over Hartmann et al (US 5,975,940).

Claim 1 requires that the pressure spring is mounted to the housing in the enclosure. Claim 13 has been amended to also clarify that the pressure spring is mounted to the housing in the enclosure. This claimed feature is not taught or suggested in Hartmann.

Hartmann's connector includes a conductive core piece which is formed as a corner angle having two legs 10 and 11, and a series of slot-shaped oblong openings 13 are defined in one of the legs 10. A separate portion or loop part 16 of a leaf spring 12 is received in each opening 13 and protrudes from one side of the leg 10. The spring 12 has curved ends 14 and 18 which engage the opening 13 and secure the spring 12 on the opposite side of the leg 10. Hartmann's spring 12 is clearly mounted to the conductive core piece, and even more specifically, mounted to the leg 10 of the conductive core piece, which is contrary to applicant's claims.

It is important to emphasize that applicant's disclosure expressly teaches away from the construction disclosed in Hartmann, where the spring is mounted to the conductive core piece. Hartmann's connector is precisely what applicant identifies in the specification on page 2, paragraph 0005. Hartmann's spring is required to be mounted or otherwise connected to the conductive core piece outside of the housing prior to placement of both the spring and conductive core piece into the housing. (Col. 2, line 63 to Col. 3, line 5). Only the conductive core piece is mounted to the housing. The conductive core piece is mounted between the walls 21 and 23 of the housing which have corresponding edge contours 22, 24 and 25 that are shaped to secure one or both sides of the legs 10 and 11 of the conductive core piece to the housing. (Col. 3, lines 14-34). No mounting whatsoever is provided for the spring 12 to the housing. For this reason, it is respectfully submitted that Hartmann does not teach or suggest applicant's claimed invention.

Similarly, claim 13 is not anticipated nor rendered obvious over Tozuka (US 5,454,730). Tozuka's connector also fails to teach or suggest a pressure spring which is mounted to the housing in the enclosure. In Tozuka, a leaf-like spring member 22 is mounted on and held by a conductive plate 21 prior to insertion into the housing. (Col. 5, lines 12-17). Even after the spring member 22 is inserted into the housing, the spring member 22 remains engaged and held by the conductive plate 21. (Col. 56, lines 8-18). So it is further respectfully believed that the claims are not anticipated nor rendered obvious by Tozuka.

Relative to the section 103 rejections of Claims 11-12, applicants have stated above that Hartmann's connector teaches away from applicant's claimed spring. It is further respectfully submitted that it would not be obvious to combine Hartmann with either Beege et al (US 6,280,233) or Wang (US 6,093,052) to supply the teaching or suggestion which Hartmann clearly lacks.

In Beege, a spring 3 pivots within the housing to allow the spring to be manipulated and moved upon the insertion of a tool 14 into the housing. In Figs. 1A-1C, the spring 3 pivots relative to a distal end of one leg 9 of the spring. In Figs. 2A-2B, the spring 3 pivots relative to a fulcrum point 21.

In the absence of applicant's disclosure, there is no teaching or suggestion to combine Beege's pivotal spring into Hartmann's connector. Beege's spring 3 is provided with a pivotal engagement in the housing so that, upon insertion of a tool, it allows removal of the electrical conductor 4 from the spring. There is absolutely no teaching or suggestion in either reference that Beege's spring should be incorporated into Hartmann's connector because Hartmann does not teach or suggest removal of the conductors. Without applicant's own

disclosure, there is no suggestion to combine Beege and Hartmann to achieve the claimed invention.

Another important reason which discourages any combination of Hartmann and Beege is that Beege's spring 3 in Figs. 2A and 2B clearly provides the electrical connection between the bare conductor 4 and the electrical contact 6. Beege's spring must be conductive. In Hartmann the spring 12 merely provides the biasing force to move an inserted electrical conductor 27 against one leg 11 of the conductive core piece, but the spring itself is not conductive. So the suggestion to put Beege's spring into Hartmann's connector lacks any merit in the absence of applicant's teachings.

Wang is also not properly combinable with Hartmann. Wang's electric wire connector connects two wires 4 and 5 in an axial orientation into a single hole 11. Each wire 4 and 5 is disposed at either end of a cylindrical casing 1. Wang's connector is completely dissimilar to a housing which provides a plurality of entry ports and receptacles for receiving electrical conductors. For this reason, it would not be logical to combine Wang's spring which is spaced from the conductive contact plate into either Hartmann's or Beege's connector. So, it is respectfully believed that claims 11-12 are further rendered nonobvious because the references are not properly combinable to show a spring which is spaced from the busbar, as claimed in claims 11-12.

Moreover, even any alleged combination of Hartmann and Wang would not teach or suggest a spring which is mounted to the housing. Wang's spring or metal retaining plate 2 has a base portion 21 which is mounted straight in an axial groove 10 on the inside of the cylindrical casing 1. Wang's plate 2 has a linear geometry which allows it to be inserted into the

axial groove 10. By contrast, Hartmann's spring defines a curved shape, which includes the loop part 16 and curves near each end 14 and 18. The spring's shape is essential to assist the biasing movement of the spring and to mount of the spring to the conductive core piece. Clearly, Hartmann's spring lacks the necessary geometry which would allow it to be mounted in the manner taught by Wang.

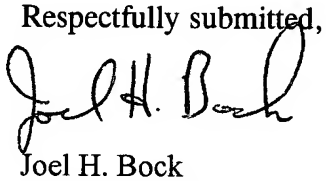
Finally, Claim 11 contains as additional limitation which is not taught or suggested in any alleged combination of the references. Claim 11 recites a projection formed on the housing and a spring including a base plate and a plurality of legs cantilevered from the base plate and further recites that the base plate engages the projection to retain the base plate in a fixed position in the housing. None of the references teach or disclose this limitation.

Hartmann's spring easily lacks any base plate. In the Office action, it is presumed that the element E1 (see the Examiner's Attachment 1) is a projection which retains a base plate 12. The curved shape of Hartmann's spring lacks any such base plate. The reference numeral 12 merely refers to the spring. The comparison falls apart even further because the element E1 does not retain the spring 12 in a fixed position. The spring 12 pivots at its loop part 16 above the element E1 (see Fig. 3) so that the element E1 does not hold anything in a fixed position.

In Beege, the spring 3 is not fixed at all. Instead, the leg portion 9 of the spring 3 moves at a fulcrum point 21 located at one end of the leg portion 9 so that the spring pivots relative to the housing. Beege lacks any projection whatsoever for retaining the spring. Neither does Wang disclose any projection for retaining the base portion 12 of the spring 2 in a fixed position in the housing.

For the above reasons, independent claims 1 and 11-13 and claims 2-10 and 14-20 which depend from these claims directly or indirectly, where applicable, are believed to be distinguishable over the cited references. Reconsideration and allowance are respectfully requested.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Claim 1 has been amended as follows:

1. (Amended) A push-in connector for connecting electrical conductors, comprising:

a housing defining an enclosure and having a plurality of entry ports and receptacles formed therein, each entry port being aligned with and spaced from [a] one receptacle, the entry ports providing access to the enclosure and the receptacles receiving electrical conductors inserted through the entry ports;

a conductive busbar mounted to the housing in the enclosure between the entry ports and the receptacles; and

a pressure spring mounted to the housing in the enclosure and engageable with electrical conductors inserted therein, the pressure spring being adapted to bias said electrical conductors into electrical engagement with the busbar.

Claim 10 has been amended as follows:

10. (Amended) The connector of claim 7 wherein the front block defines an angled wall supporting the pressure spring prior to entry of [a] said electrical conductors.

Claim 13 has been amended as follows:

13. (Amended) A push-in connector for connecting electrical conductors, comprising:

a housing including a case and a cap which cooperate to define an enclosure, the cap having a plurality of entry ports which provide access to the enclosure;

a conductive busbar having first and second edges, the first edge being supported in the case and the second edge being supported in the cap; and

a pressure spring mounted to the housing in the enclosure and engageable with electrical conductors inserted therein, the pressure spring being adapted to bias said electrical conductors into electrical engagement with the busbar.